A Mississippi Graveyard

The Perfect Place for a Plant Mystery

Some plants stay put. Others wander all over the globe. And the journey of one restless plant—an Old World native that now thrives in several cemeteries in Meridian, Mississippi—could well be linked to the final resting places of several members of a royal Gypsy family.

Graveyards can be a good place to scout for plant species, which is what Mississippi State University graduate student Lucas Majure was doing in 2007 when he found an unknown sedge. He asked botanist Charles Bryson, who works at the Agricultural Research Service's Crop Production Systems Research Unit, in Stoneville, Mississippi, to help identify the mystery plant.

Bryson always keeps an eye out for the appearance of new and potentially invasive plants. After several months of searching, he was able to confirm that the plant was blue sedge *(Carex breviculmis),* a native of Asia and Australia and previously unknown from North America.

Bryson checked out three possible routes of introduction—planes, trains, and automobiles. He didn't find the sedge along highways or around military airfields in the area. He found it growing along the railroad tracks, but only around campgrounds used by vagrants and other transients. And he found it in or around four cemeteries in Meridian, including Rose Hill Cemetery, where the Queen of the Gypsies was buried in 1915. The King of the Gypsies was later buried alongside his queen, and the cemetery became a draw for visitors from all over the world.

Given the plant's restricted and distinctive distribution in the region, Bryson thinks that global travelers introduced the sedge into Mississippi, possibly via seeds trapped in clothing or by leaving plants or soil at the gravesites of the Gypsy royalty. Then cemetery caretakers may have spread plant material from the first introduction site to the other cemeteries via contaminated clothing and lawn care equipment.

Blue sedge is clearly a survivor, since it can even grow in sidewalk cracks. At two sites where it is established, it now exhibits "weedy" characteristics and reproduces and spreads profusely. Bryson collected leaf samples and preserved them in silica gel for DNA fingerprinting and is looking for a cooperator who can supply Old World leaf material for comparison. "With a diverse sample from the native range, fingerprinting could provide the origin of the introduction," he says.

Bryson and Majure published their findings in the *Journal of the Botanical Research Institute of Texas,* and Bryson is keeping an eye on the plant. "It's considered a weed in Asia, and I think it has the potential to become problematic in fruit and nut crops," Bryson says. "So we could be looking at another headache for the lawn and turf world."—By **Ann Perry,** ARS.

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In Stoneville, Mississippi, botanist Charles Bryson uses a dissecting microscope and some herbarium specimens to identify the blue sedge, *Carex breviculmis,* discovered at a cemetery in Meridian, Mississippi.

STEPHEN AUSMUS (D2295-13)

Blue sedge, *Carex breviculmis,* near a tombstone at a cemetery in Meridian, Mississippi.

CHARLES BRYSON (D2301-1)